



Butterfly & Other
Invertebrates Club Inc.
Newsletter

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AIMS OF ORGANISATION

- To establish a network of people growing butterfly host plants;
- To hold information meetings about invertebrates;
- To organise excursions around the theme of invertebrates e.g. butterflies, fireflies, ants, dragonflies, beetles, freshwater habitats, and others;
- To promote the conservation of the invertebrate habitat;
- To promote the keeping of invertebrates as alternative pets;
- To promote research into invertebrates;
- To encourage the construction of invertebrate friendly habitats in urban areas.

NEWSLETTER DEADLINES

If you want to submit an item for publication the following deadlines apply:

March issue – February 21st;

June issue – May 21st;

September issue – August 21st;

December issue – November 21st

COMMITTEE MEETINGS

A quarterly meeting is now being scheduled in order to plan club activities and the newsletter. The next meeting is being held on Thursday 6th May, 1999, at Georgina's home. Please phone 3349 1967 for directions.



EDITORIAL

Welcome to the 12th issue of our Club's newsletter. The information we are printing on a number of issues is proving valuable to a wide range of people. At least one report of new food plants printed in the newsletter will be quoted in the forthcoming "The Butterflies of Australia: Their identification, biology and distribution". This book has been written by Dr. Michael Braby at CSIRO Entomology and will be published soon (we hope). I have it on good authority from the author that the manuscript stands 14cm tall!! It will come in two volumes. It will be great to have an up to date version of the authoritative text on Australia's butterflies.

Our poster "The Swallowtail Butterflies of coastal southern Queensland and northern New South Wales" is being well received, and our club's membership has almost doubled since its release, so it is proving to be a good source of information and is generating interest. If you are one of these new members Welcome. We hope to see you become involved in the Club's activities in the near future.

The poster could be greatly assisted if we could find someone to help with its promotion. We have lots of ideas, but no time to carry them out. If you feel that you could put in an hour or two a week or fortnight, we could make great strides in letting more people know about the wonder and value of butterflies and growing host plants. The last few months have seen much of my time taken up with the Australian Fritillary recovery planning process and developing a very complex funding submission to the Natural Heritage Trust to enable us to continue the work. Here's hoping.

Helen Schwencke

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Butterfly & Other Invertebrates Club

President's Report 1998, to be delivered to AGM 23rd January, 1998, at Toohey Mountain Scout Hall, 6 Solna St., Tarragindi

October 1998 saw the fourth anniversary of our Club, and the completion of our first major project – the production of our poster “Lifecycles of the Swallowtail Butterflies of coastal southern Queensland and northern New South Wales”. This was an enormous task, especially for the artist, Lois Hughes who painted the host plants, and yours truly, who coordinated the effort, provided the lifecycle slides (except the Richmond Birdwings), organised for the checking of the information. Thanks goes to all, especially Club members, who assisted with the process of checking the information, located sample of hostplants and larvae, promoted the poster to their friends and colleagues, and supported the project in ways too numerous to mention. Thanks also to the Gaming Machine Community Benefit Fund for financial support.

We are also nearing the completion of a second project – the development of the Interim Recovery Plan for the Australian Fritillary. The process of writing this plan took regular meetings at 6 weekly to 2 monthly intervals. The plan requires a minor amount of editing and is nearly ready to be submitted to the Environment Protection Authority. Thanks goes to the many and varied participants of this process. We will be seeking National Heritage Trust funding to implement components of the recovery plan. A further project funded by the Brisbane City Council to determine the extent of existing violet habitat, and potential rehabilitation sites was undertaken by Frank Jordan. To complete this project we are preparing some display materials.

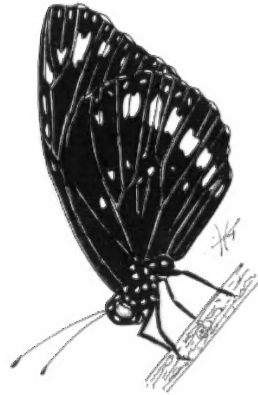
The value of our quarterly newsletter has been regularly commented on. Some of the new food plants for various species of butterflies first reported in it have been incorporated into the forthcoming revision of Butterflies of Australia by Dr. Michael Braby. This year has seen an excellent range of articles, letters, notes and other material published. I would like to take this opportunity to encourage all of our members to record their observations or questions and submit them for the newsletter. The newsletter is aimed at lay people, and while every care needs to be taken to be accurate, it is important that everyone feels that they can contribute. Thanks go to Daphne Bowden for her work in compiling the newsletter, to Lois Hughes for her illustrations, and to all our contributors, especially our regulars John Moss and Frank Jordan. Thanks also goes to Steve McGoldrick, Principal, Manly West Primary School for his continued assistance.

The year has, once again, been an active one for the club. Our last AGM in January 98 was accompanied by a light-trapping evening at Downfall Creek Bushland Centre.



The Australia Day weekend saw some members joining the Qld Naturalists visiting butterfly habitat on the Stanley and Mooloolo Rivers. Thanks John for organising these activities. February 14th saw our Club visiting the Mt. Glorious Biological Centre for a tour of the centre and light-trapping in the evening. Thanks to Katie and Anthony Hiller for their time and making their premises available. The 21st March saw our excursion to the Nudgee Beach Reserve, Boondall Wetlands and the Nudgee Beach Environmental Education Centre's butterfly garden.

On Thursday 23rd April, Dr. Tim Heard gave an informative talk about Native Bees. It was fascinating to get a glimpse of the complexity of their biology. Aspects of his talk were reported in the newsletter. Thanks Tim. Our May excursion to see Common Crow overwintering sites at Toohey Forest was washed out. David Barnes addressed our Club on Thursday, 25th June on the topic of "Backyard Wildlife". This fascinating talk featured his own backyard at Bracken Ridge, and his many years of observations and recordings. Thanks David.



Common Crow

An afternoon excursion on July 18th took us to Indigiscapes and the new Coolnwynpin Conservation Reserve in the Redlands Shire. While it was a dull day, and not many butterflies were on the wing, it proved a delightful and useful excursion for identifying and confirming some butterfly host plants. Thanks to John for organising this afternoon and the subsequent BBQ.

Our next excursion was to Stradbroke Island on the weekend of 19th and 20th September. Unfortunately our aim of seeing the Satin Blue which is on the wing for \pm 2 weeks per year, was not fulfilled, however, a good and informative time was had by all. Thanks John for organising this excursion.

Due to ill-health our speaker on Slaters in October was cancelled. We hope to be able to hear Dr. Glen Ingram's talk at some time in the future. November 21st took the Club to Graham McDonald's Toona Rainforest Garden and native plant nursery at Mudgeeraba. It was wonderful to see what can be accomplished with bare ground and a few years of growth. Thanks Graham for the tour of all your hard work and subsequent write up for our newsletter.

Our end of year function involved an afternoon excursion to SOWN's (Save Our Waterways Now) revegetation work on the Enogerra Creek. Club members Vera and Fred Moffat hosted this activity, and their report will be in the newsletter. Thanks

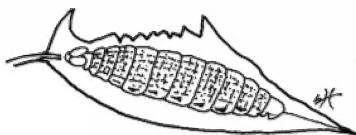


Fred and Vera for your efforts. A number of club members were also pleased to find larvae of the Common Red-eye during this excursion. This afternoon activity was followed by a BBQ and light-trapping activity at Jolly's Lookout. A report will appear in the newsletter. Good fun was had by all. Thanks John Moss and Lindsay Popple for your light-traps.



Common Red Eye

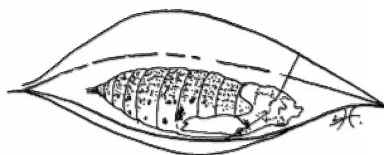
A number of other activities involved holding



Common Red Eye larva

stalls for public education purposes. These included the Society for Growing Australian Plants Annual Spring Flower Show in September, the Brisbane Water Festival, the Mt Tamborine environmental fair, and a market at the Lutheran Church at Woolloongabba. Thanks goes to all who assisted with these stall and principally to Frank Jordan.

Throughout the year our quarterly planning meetings to conduct the business of the association and plan the program and newsletter have continued. These meetings frequently become an interesting exchange of information. All members are welcome to attend.



Common Red Eye pupa

Now that the poster has been produced the prospects for our club are very positive. Membership has already nearly doubled. The challenge will be bringing the new members into active participation of our activities. Last but not least, I'd like to thank Rob, John and Georgina for the roles they've played as treasurer, vice-president and secretary, to Terri, Daphne and Kay for their involvement in the committee, and to everyone who comes along to our meetings and activities. I have enjoyed your company and shared interest in invertebrates.

Helen Schwencke
President



EXCURSION REPORTS

Report of BOIC Excursion to part of S.O.W.N.'s Revegetation Area at The Gap on 12th December 1998.

Background Notes: Save Our Waterways Now Inc (SOWN Inc) was initiated about 4 years ago to cover the Enoggera Creek catchment area which includes some 48 kms of creek banks and hundreds of kms of dry gullies and feeder creeks. This was divided up into some 94 sizeable planning units which could be worked on and maintained in an on-going manner by volunteers and team leaders. The whole project is now organised by a network consisting of a Management Committee and a paid Coordinator (Brian Sait), and involving some 940 local volunteers.

Object of the Excursion: To look at three planning units with varying habitats and to see something of what is being done to achieve one of SOWN's objectives – ie. “To create an environment for the return and safe haven for native fauna” c.f. with one of BOIC's aims – “To encourage the construction of invertebrate friendly habitats in urban areas.”

The excursion was organised by club (and SOWN) members, Vera and Fred Moffet. Three adjacent sites were chosen:

1. Corramulling Park (E55A) – cleared of some natural vegetation when 66 Town Houses were built.
2. Behind the Pony Club (E55B) - mainly untouched.
3. Behind upper Pony Club and Yoorala Street between Turana and Elgata Streets. (E55B/C). Here the steep banks provided a great dumping ground for unwanted household and building rubble, garden refuse, escaped exotic plants, and invasive weeds, and large areas were covered with Madeira Vine (*Anredera cordifolia*) and Siratro (*Macroptilium atropurpureum*). Added to this the riparian area was disfigured by the rock upheaval caused when the sewage pipes were put through. It was almost impossible to reach the creek. This is the area where team leaders Vera and Fred Moffett work.

The Trip: Unfortunately the day was overcast and the butterflies were not out in force.

Site 1: The trip commenced at the Gazebo and Lookout in Corramulling Park where there were chew marks on a Sandpaper Fig (*Ficus coronata*) which indicated the presence of some invertebrates. The eggs and larvae of the Common Moonbeam Butterfly (*Phyliris innotata*) and Figleaf beetles (*Poneridia semipullata*) were found. Nearby was a native cockroach on an exotic grass blade while close by, making a series of loud, rather harsh sounds were Floury Baker (*Abrieta curvicausta*) cicadas.



They have the unusual cicada habit of sitting on a tree branch head downwards while most cicadas perch head uppermost.

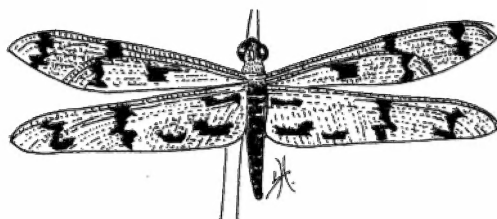
Blue Triangle (*Graphium sarpedon*) butterfly eggs and small larvae were observed on a native laurel (*Cryptocarya* sp). Their life cycle takes some time and they can be parasitized by wasps and Tachinid flies. Flying around were a Lemon Migrant (*Catopsilia pomona*) and the Common Grass Yellow (*Eurema hecabe*). On low vegetation was a reddish dragonfly

(*Orthetrum villosiovittatum*).

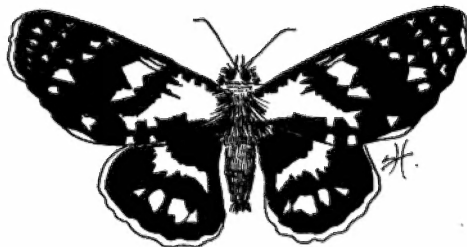
Several mature larvae of the Common Red-eye butterfly (*Chaetocneme beata*) were found in their characteristic leaf-shelters on the understorey plant *Eupomatia laurina*. Some of these were taken for life history studies and photography. Along the newly-



Common Moonbeam B'fly and larva on Hostplant



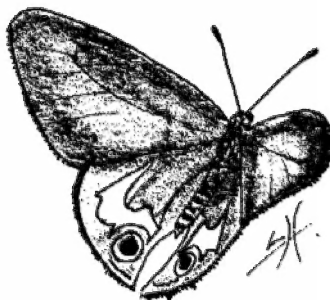
Dragonfly (*Rhyothemis graphiptera*)



Joseph's Coat Moth

confused with the weedy, exotic Balloon Vine. This is a host plant for the spectacular day-flying Joseph's Coat Moth (*Agarista agricola*), and a large and beautiful Hawk Moth (*Gnathothlibus erotus*), which also likes *Pavetta australiensis*. Then, great excitement as a caterpillar of the Cup Moth was being eaten by an Assassin Bug (*Pristhesancus plagipennis*). Also, nearby were leaves with distinctive oval and circular pieces cut out - evidence of the work of the

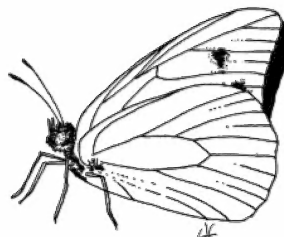
constructed walkway to the Pony Club another cicada, *Psaltoda claripennis* (the "Clanger"), was heard making a loud, rattling song. Next the climber, *Cayratia clematidia*, was pointed out - easily



Common Brown Ringlet



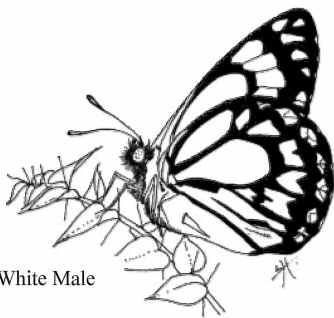
leaf cutting bee (*Megachile sp.*). Near grasses were a Common Brown Ringlet butterfly (*Hypocysta metirius*), various unidentified small skippers and grass darts and a Common Australian Crow (*Euploea core corinna*). A Brown Kurrajong (*Commersonia bartramia*) and a *Backhousia myrtifolia*, both in flower, were pointed out as good native nectar plants, and though the latter is usually



Common Albatross - Male

regarded as a small shrub or tree it can, in certain conditions, reach 40 feet. A small number of white butterflies sighted included the Caper White (now listed as *Belenois java teutonia*) and a male Common Albatross (*Appias paulina ega*). Sometimes the Australian Gull (*Cepora perimale scyllara*) is present with these other two butterflies - it is hard to distinguish from the female Common Albatross.

We proceeded over the picturesque new walking path with wooden bridge and seat towards the Pony Club (it is intended to extend this path through sites 2 and 3 along Yoorala Street and on to Brisbane Forest Park).



Caper White Male

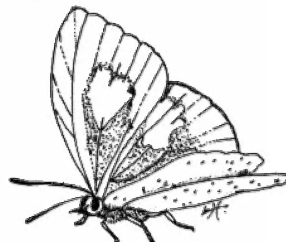
Site 2 (Pony Club):

The main features studied were mature specimens of trees and a vine including: - Socketwood (*Daphnandra spp*), host plant for Macleay's Swallowtail (*Graphium macleayanum*).

Casuarina cunninghamiana. This is a host tree for the mistletoe *Muellerina celastroides* and it, in turn, a host plant for the Common Jezabel butterfly (*Delias nigrina*).

Black Bean (*Castanospermum australe*) secondary or lesser host for the Pencilled Blue (*Candalides absimilis*).

Native Wisteria (*Callerya megasperma* formerly *Milletia megasperma*) host plant for the Pencilled Blue and the Large Banded Awl (*Hasora khoda haslia*).



Pencilled Blue

White Doughwood (*Melicope micrococca*), host plant for the Orchard Swallowtail (*Papilio aegaeus aegus*).



Other trees included *Waterhousia floribunda*, a Red Kamala (*Mallotus philippensis*) and the Foam Bark tree (*Jagera pseudorhus*).

The main butterflies were Blue Triangle (*Graphium sarpedon choredon*), Painted Lady (*Vanessa kershawi*) and Meadow Argus (*Junonia villida calybe*).

Site 3. Upper Pony Club/Yoorala Street between Turana and Elgata Streets.

We walked over a newly-formed track along the riparian area. The main activity here has been the eradication of thousands of *Ochna serrulata* and Purple Succulent (*Callisia fragrans*) plants which spoil a particularly beautiful area. Often Evening Brown butterflies (*Melanitis leda*) are seen here. A great find was a stand of delicate white-flowered *Aneilema acuminatum* in the moister shaded areas. Further along, where there is a major upheaval of rocks, much work has been carried out; one area having been direct sown with seed of native Kangaroo grass (*Themeda triandra*) and Emu's Foot (*Cullen* (formerly *Psoralea*) *tenax*) and further planting of suitable native trees, grasses, sedges, ferns, *Lomandra* and *Dianella* and native violets. A particularly pleasing aspect is the regeneration of local species such as Love Flower (*Pseuderanthemum variable*), Love Creeper (*Glycine clandestina*), an orchid, *Geodorum densiflorum*, *Wahlenbergia* spp, native ferns and native *Plectranthus* (or "3 flavoured herb").

Last season the White Nymph butterfly's (*Mynes geoffroyi*) larvae and pupae were discovered on the Stinging Tree (*Dendrocnide excelsa*) but no adults were seen emerging. Nearby, a large Monkey Rope Vine (*Parsonsia straminea*) attracts a large variety of butterflies including the Blue Tiger (*Tirumala hamata*).

Unfortunately time and conditions prevented a detailed survey of the area but various Dragonflies and Skippers, Swallowtails and other butterflies were seen, as well as the damselfly *Nososticta solida* and Dragonfly *Rhyothemis graphiptera*.

We scrambled up the bank to the Elgata end of Yoorala Street where a great number of native trees have been planted between there and Turana Street. Here the Soap Tree (*Alphitonia excelsa*) was studied with its small larvae of the Small Green-banded Blue (*Psychonotis hymetus taygetus*).

Other host plant trees for invertebrates were identified: e.g. *Breynia oblongifolia*, *Acacia falcata* (in flower), *Microcitrus australasica*, *Dodonea triquetra*, *Hibiscus splendiflorus*, *Hibiscus heterophylla*, *Euodia* spp, *Brachychiton* sp, *Lophostemon confertus*, *Lophostemon suaveolans*, *Cassia brewsteri* and *Toona australis*.

It was time for a "social" cup of tea, with some delicious carrot cake on Vera and Fred's back patio. In their garden they have planted a selection of nectar and host plants, some native, some exotic, including the Native Mulberry (*Pipturus argenteus*), *Pararistolochia praevanosa*, *Rauwenhoffia leichhardtii*, *Asclepias curassavica*, citrus trees, *Viola betonicifolia*, Emu's Foot (*Cullen tenax*), Ganges Bluebell (*Asystasia*



gangetica, *Passiflora suberosa*, Pentas, Everlasting Daisies, Buddleia and native grasses. As a result, quite a variety of butterflies are now visiting.

Soon it was time for members to drift off to their cars homeward bound, or on to the end-of-year BBQ at Jolly's Lookout.

Vera Moffett

Light-trapping at Jolly's Lookout, 12th December 1998.

Our end of year function took us to Jolly's Lookout near Mt Nebo, after a pleasant afternoon looking at the revegetation work being undertaken on Enoggera Creek by Save Our Waterways Now (SOWN) which includes our own Club members, Fred and Vera Moffet.

After a picnic tea and BBQ, light traps were established and attracted a wide variety of insects. Since many were unknown to club members, the list below is intended to give a flavour of the diversity of animals that this activity brought to light. The list included:

Lacewings: Ant-lion adults and five perhaps six different species of mantid neuropterans, some of which were mimicing wasps and praying mantids.

Beetles: uncountable numbers of species of beetles including one longicorn, one christmas, a male and female rhinocerus, a dung and a large click beetle, amongst many others.

Cicadas: a male and female Bladder Cicada, a female *Birrima varians* cicada, a Brown Bunyip (*Tamasa tristigma*) and Red Squeaker (*Pauropsalta rubea*) female.

Moths: two very large and one small species of woodmoths family *Cossidae*, two hawkmoths one of which was the privet hawkmoth (*Psilogramma menephron*), a clearwinged day-flying moth and a Whistling Moth (*Hecatesia fenestrata*), various pearl-winged moths, some with a beautiful purple sheen, an emerald coloured moth, family *Geometridae* and to crown the event, shortly before we planned to pack up, two different species of froth moth (*Rhodogastria crokeri* and *R. serica*) appeared. These moths, members of the tiger moth family, produce a frothy substance from between the head and the carapace to deter predators.

Other insects included various sap sucking bugs, a number of different leafhoppers, and a one-hind legged katydid and many more.

Helen Schwencke



BOIC Excursion to Redland Bay Mangrove Sites on 13th February, 1999

After a convincing imitation of the recent northern monsoon, the weather decided to smile upon the Butterfly Club's outing to Redland Bay on Saturday 13th February. Our group arrived at the first stop and gathered to listen to John Moss' pre-excursion briefing on the butterflies we hoped to see. A couple of cicada enthusiasts had already disappeared (armed with a formidable array of nets) in the direction of some promising calls of the mangrove inhabiting, olive form of the so-called "Black Prince" (*Psaltoda plaga*).

The shoreline had two major mangrove species - the tall Grey Mangrove (*Avicennia marina*) and the shorter River Mangrove (*Aegiceras corniculatum*) the flowers of which are a food source for many of the local *Lycaenid* and other butterflies. In this area we saw several Dull Jewels (*Hypochrysops epicurus*) one of which was collected alive for subsequent photography.

This common name does not do them justice - "Mangrove Jewel" would be more appropriate - as the males exhibit a rich purplish sheen on their upperside wings and striated, sparkling green and red underside markings. There is another species of Jewel in the mangroves, the aptly-named Copper Jewel (*Hypochrysops apelles*) which often occurs with the former but is distinctly different.

We then moved into a small parkland area, planted with exotics including flowering Pentas, appreciated by the butterflies and several assassin bugs and flower spiders lurking in their midst in hope of easy prey. One unfortunate butterfly was trapped in an orb weaving spider's web well out of our reach but was very actively trying to escape. Several members of the party decided to retrieve it for identification purposes. After much energetic stick throwing, down came web, butterfly and all - with the latter promptly disappearing! The frustrated group members decided it was probably an *Ogyris amaryllis* (Amaryllis azure), several others of which were seen flying high overhead.

Several Dull Jewel males were sighted "dog-fighting" above a *Cupaniopsis anarcardiodes* ("Beach Tuckeroo" tree). Their spiralling aerial combat was fascinating to watch. Other species seen here included a Pale (Blue/Green) Triangle (*Graphium eurypylus*), Common Eggfly (*Hypolimnas bolina*), Common Crow (*Euploea core*), Lemon Migrant (*Catopsilia pomona*), Orange and Yellow Palm Dart (*Cephenes augiades* and *C. trichopepla*) and a Six Line-blue (*Nacaduba berenice*). These last mentioned feed on *Cupaniopsis* flowers.

Helen photographed a female longicorn beetle (*Aridaeus thoracicus*) laying eggs on the bark of one of the trees. The larvae of this beetle make holes in the trees which



are later used by ants as homes. These ants, in turn, are eaten by the larvae of the very rare Illidge's Ant-blue (*Acrodipsas illidgei*) (which we didn't see).

Next stop-off point was the appropriately named Orchard Beach where we saw remnants of the orchard that was once part of the farm in this area. There were several healthy custard apple trees surviving and even a chocolate pudding tree. This area was very attractive with bay and island views from the cliff-tops and a large freshwater lagoon behind mangroves. Unfortunately, we were greeted by an enthusiastic welcoming committee of invertebrates - billions of mosquitoes! Helen's super-strength Aerogard saved us from impending anaemia, and we were able to observe many pairs of Black and White Tigers (*Danaus affinis*) amongst their hostplant, the Hoya-like *Cynanchum carnosum*, and a lone and very battered Meadow Argus (*Junonia villida*). Near the lagoon the group saw a Dainty Swallowtail (*Papilio anactus*), a Glasswing (*Acraea andromacha*), and an Evening Brown (*Melanitis leda*), plus several bird species from wrens to raptors (including a surprise Peregrine falcon (*Alternanthera denticulata*)). A host plant of the Common Eggfly was growing at this site.

The cicada-hunters had a successful foray into the mangroves, capturing a nice specimen of the attractive Mangrove Drummer (*Arunta interclusa*), along with many Black Princes, Red Squeakers (*Pauropsalta rubea*), Brown Bunyips (*Tamasa tristigma*), Wattle Cicadas (*Cicadetta oldfieldii*), and Paperbark Cicada (*Cicadetta hackeri*), were also encountered.

The junior members of the party collected several species of small crabs in the mangroves, demonstrating speed, dexterity and agility in the muddy conditions! The mangroves also sported several of the yellow form of a marine gastropod mollusc. Behind the mangroves Frank pointed out the eggs of the Common Crow (larger yellowish, oval-shaped eggs) and the Black and White Tiger (smaller, rounded white eggs). The tiny Saltpan Blue butterfly (*Theclinesstes sulphitius*) was sighted near *Salicornia* sp., one of its recorded host plants.

An interesting afternoon with plenty of variety!

Rosylin and Lindsay Popple



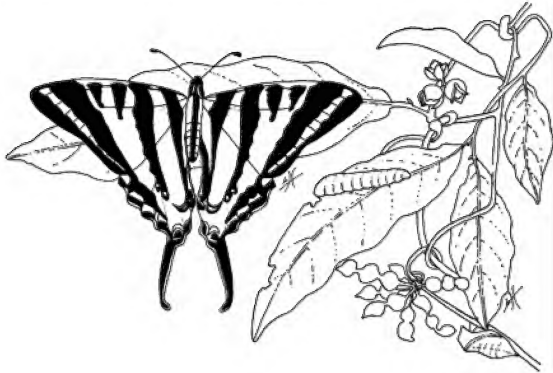
REPORTS

The following is part of a report by John Moss extracted from the Chinchilla Field Naturalists club Newsletter "Urimbirra".

On the weekend of the 3rd and 4th October 1998 the "Western Wanderers" had their reunion at Graham and Donald Rogers lovely home at Crows Nest. On the Sunday Jim Johnston of the Queensland Nats invited us to explore the Ravensbourne National Park and visit his property which is adjacent to the national park.

We met at the Ravensbourne Lookout/Picnic Ground and Jim led us into the rainforest which has a great diversity of species, including large Red Cedars (*Toona ciliata*) and remnant giant Sydney Blue Gums (*Eucalyptus saligna*) which dominate the canopy.

A silent pair of Wompoo Pigeons were spotted feeding in a large Moreton Bay Fig at the lookout site, when we returned there for morning tea. They looked truly magnificent with their resplendent yellow green and purple plumage shining in the sun. On that same tree, but on the outer foliage, was seen a Joseph's coat or Agricola Moth. This magnificent day flying moth, with a pattern of red, yellow and blue markings against a black background, was seen to fly out from its leafy perch, spin around several times and then return to the same or nearby site. I suspected that this was a male and was awaiting a suitable mate, although in my experience females keep their flight path down fairly low around bushes etc. when looking for nectar or oviposition sources. We had actually, earlier encountered its hostplant, the vine *Cissus opaca*, on the edge of the forest, trailing over some lantana bushes. No doubt a search would have revealed its larva had we the time to do so.



Four Bar Swordtail, larva, pupa and host plant

Amongst other lepidoptera of note, was a first sighting for Ravensbourne of a Four-bar Swordtail butterfly sipping nectar from lantana flowers on the north eastern boundary of the park near where Jim was showing us his native bee "diggings". Its main hostplant, the Zig-Zag or Rauwenhoffia vine (*Melodorum leichhardtii*) has not been recorded from this area, and another hostplant the Canary Beech (*Polyalthia nitidissima*) is more a coastal species. Since this sighting I believe Jim has been



searching high and low for any evidence of more specimens and their elusive hostplants! As both those species are in the family Annonaceae, which includes the Custard Apples, Jim may yet have some success if he cares to look in his orchard!

Two other butterflies of note seen on flowers in the rainforest gully were the pretty Penciled Blue and the cryptic Macleay's Swallowtail, whose colouration mimics a green and brown half-dead leaf.

John Moss
October 1998

Nature Note: “ ‘Fellow-travellers’ in a Caper White Migration”

Many of us saw and marvelled at the recent Caper White butterfly migration through Brisbane and much of south-east Queensland. It reached its peak about the 17th, 18th and 19th October 1998 which was about the time that some of us were on the mangrove boardwalk at the Nudgee Beach section of the Boondall Wetlands. Attendees may recall the flowering River Mangrove *Aegiceras corniculatum* which was covered by several species of white and yellow butterflies all fighting for the blossom with the most nectar.

For some species, this tree was the local “watering hole” down the road, for others it was a welcome stopover on a vast trek that may have been a hundred or many more kilometres. The Lemon Migrants, Common Migrants and Common Albatrosses could easily have originated from local scrubs in remnant bushland where their hostplants (cassias, sennas and *Drypetes*) are known to occur.

On the other hand, the much greater numbers of Caper Whites could only have come from areas further west where there was sufficient hostplant (*Capparis* species) available. Having exhausted their supply of hostplant (in most cases after total defoliation of the Caper bushes) they set off, presumably in search of suitable oviposition sites. The actual stimulus to mass migration of Caper Whites and the factors dictating direction of their flight are largely unknown.

In this case the direction of the migratory flight appeared to us to be in a nor-nor-westerly direction, towards the Redcliffe Peninsula. This was rather surprising because, if the original commencement direction was NNW, then their origin would have been the islands of Moreton Bay or even more unlikely further to the south-east. Thus it is most likely they had changed direction. Interestingly, on the following day whilst standing at Thornside Point, I observed them to be flying in a north-easterly direction which would have clearly taken them out over the bay.



While this mystery remained unsolved, another one emerged. Among the flight I noticed some smaller specimens some of which were Caper Whites, but also others that were found to be different butterfly species (and also *Capparis* feeders). These were the Australian Gull, Chalk White and Common Pearl White. They appeared to be part of the migration because they maintained the same directional flight characteristics as the Caper whites, although they were in much smaller numbers. I reasoned that they too may have been local as they had one common hostplant *Capparis arborea* which grows in coastal rainforest and vine scrubs.

What upset this calculation and deepened the mystery further was the capture of a single specimen of the Narrow-winged Pearl White, a species which has its home in the dry vine scrubs west of the Great Dividing Range, and from where we suspect the majority of migrating Caper Whites come from. Surely this smaller species also had its origin in the western scrubs. Did it accompany the Caper Whites by choice? Were the stimuli affecting the Caper Whites also affecting it? And why was it in much smaller numbers? It was tempting to assume that the Caper Whites which had eaten themselves out of house and home had also ravaged the hostplant of this smaller species and forced it on to the same migratory path! We certainly have much to learn about the bio-ecology of these and very many other species.

John Moss

CREATURE FEATURE

MACLEAY'S SWALLOWTAIL

(*Graphium macleayanum macleayanum*) by Bob Miller

One of our butterflies which has tails on its hindwings is the Macleay's Swallowtail. These are reasonably common on the Blackall Range and the surrounding hills at the present time and will be mainly noticed as small black dots flying around the tops of trees. This problem, as with any other high and fast flying butterfly, is easily overcome by planting nectar producing flowers.

This will inevitably bring them back to earth, so to speak, where they can be admired at a closer range. The Macleay Swallowtail is very similarly coloured to the Pale Green Triangle. The best way to recognise the Macleay Swallowtail is by the tail on each of their hindwings.

I have actually been able to raise the larvae of this butterfly over the last two years, for the first time since becoming involved with butterflies, way back in 1965, and now have them actively breeding in my Landsborough backyard, just by planting the right plants.

Which plants should you grow? The best natives I have found for Southeast



Queensland are: Rose Maple (*Croptocarya erythroxylon*). Domatia Tree (*Endiandra discolor*) and Three-vein Cryptocarya (*Cryptocarya triplinervis*).

The Macleay Swallowtail larvae are olive brown at birth, turning lime green in colour as they get older. The pupae are light green and are found on the underside of the foodplant leaf. They are suspended by their tail and a central silken girdle, and have a small projection on the head end.

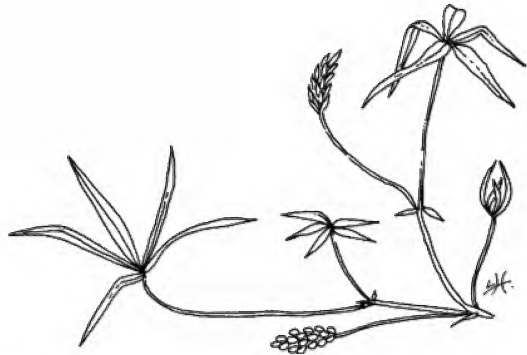
From Barung Landcare News February-March 1999 issue.

CREATURE NOTES

Creature Note # 14 – Common Grass Blue (Zizina labradus)

While weeding our patch of Emu's foot, *Cullen tenax*, formerly *Psoralea tenax*, Frank found two tiny eggs on a leaf. Always on the lookout for any new butterfly species to visit our garden, we brought the eggs inside to raise the caterpillars.

After some days two miniscule larvae hatched out and started feeding on the Emu's Foot leaves and flowers. The larvae fed and grew for about two weeks before metamorphosing into small greenish pupa. After a week as a pupa, Common Grass-Blues emerged from the chrysalis.



Emu's Foot

This butterfly feeds on a very wide range of legumes. However, while not unexpected as a host, *Cullen tenax*, is not listed in Common and Waterhouse as a food plant.

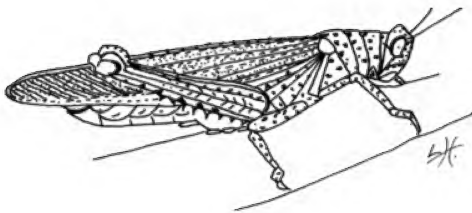
Helen Schwencke

Creature Note #15 - Hedge Grasshopper (Valanga irregularis)

The Hedge Grasshopper is Australia's largest grasshopper, and surprisingly for an insect of this size, it is quite common in suburban gardens. Here it munches on a large variety of garden shrubs. It rarely, if ever, eats grass.



So where does it come from originally? One book suggested it may have been a rainforest grasshopper. While it does not take much imagination to visualize a mature adult flying from tree to tree in the rainforest canopy and munching on large tough leaves, what of the small hatchlings on the forest floor. There is little in the way of soft grass in a rainforest.



Well, I was able to watch the progress of this year's hatchlings in my garden. There is a single generation each year, and there are seven instars or stages of growth. Their choice of foodplants fitted in well with the rainforest scenario.

Some of the plants selected were Stinging Nettle (*Urtica incisa*), Native Mulberry (*Pipturus argenteus*), Poison Peach (*Trema aspera*), Sandpaper fig (*Ficus coronata*) and Love flower (*Pseuderanthemum variabile*). Large leaves were not a problem, the small grasshoppers being able to eat holes in the middle of leaves as well as starting from the edges.

Unfortunately I had to terminate my further observations (I was interested in seeing how many different colour forms emerged) as most of my grasshoppers have disappeared. While the Noisy Miner birds are obvious suspects, I have grave suspicions about a very large and fast cuckoo and its hapless Peewee foster parents.

Frank Jordan

"BYE-GONE BUTTERFLY DAYS"

John Moss has been pouring over old entomological journals etc. and has kindly put together the series of articles which will appear in this and other editions of the newsletter.

In one of the very first issues of the Queensland Naturalist Club's journal "The Queensland Naturalist", Vol. 1 No. 3, September 30th, 1908, (the 3rd year of the Club), an interesting report appeared under the authorship of the late Rowland Illidge, an early naturalist and entomologist. The report entitled "Insects collected in one day (21st June, 1908) in the Bulimba Swamps, near the Brisbane River" is reproduced in full below with permission of the Council of the QNC.

The most remarkable facet of this list of butterflies "observed or captured" is the diversity of species present in Brisbane in mid-winter, which also probably explains why "no Papilios or Skippers" were seen. An interesting aspect is the comment on the



favourable weather conditions: "Bright warm day, showers during night preceding, wind, northerly after mid-day". Also a comment on the method of travel was quite noteworthy - "Coming home up the River in the boat" gives a clue as to the probable difficult access to this area which was probably not serviced by roads. As to the exact location of the "Bulimba Swamps" in 1908, this writer is unable at this time to give a precise fix! **Any comment from our readership would be welcome.**

Rhopalocera - observed or captured. *Salatura affinis* - one only seen. *Anosia menippe* - several in good condition; noted also larvae. *Chanapa corrina* - abundant. *Junonia villida* - not common. *Pyrameis itea* - one specimen seen. *Hypolimnas bolina* - several males and females in fine condition. *Neptis Shepherdii* - several specimens. *Melanitis leda* - several in fine condition. *Danix taygetus* - many; took three males with white in forewing. *Candalides argarota* - one female taken; several seen. *Nacaduba ancyræ* - var. *florinda* - several taken; all males. *Nacaduba lineata* - many about; three pairs captured. *Nacaduba palmyra* - one male of this rare insect seen flying about loranthus. *Nacaduba dion* - a few noted, but not plentiful as on a previous occasion (7th June). *Nacaduba berenice* - abundant; males and females taken. *Nacaduba dubiosa* and *felderi* - not uncommon; netted a few specimens of each, but they were very wary and difficult to get at. *Ogyris amaryllis* - several seen in usual haunts. *Terias hecabe* - abundant. *Terias libythea* - several. *Terias smilax* - one specimen only. *Elodina angulipennis* - abundant. *Elodina parthia* - scarce; plentiful on the 7th as usual. *Huphina perimale* - winter forms in fair numbers about. *Appias ega* - several, mostly males; took a pair. *Delias argenthona* and *Delias nigrina* - both plentiful; did not bother to net any. *Delias nysa* - many about, but appeared worn; captured one with sub-marginal spots of hind wings almost obsolete; *Belenois java* - not so abundant.

No Papilios or Skippers were seen, and the ubiquitous *Acraea andromacha* and *Pyrameis kershawi* were absent. Coming home up the River in the boat specimens of *D. argenthona*, *nigrina*, and *nysa* were noted flying over, and an occasional *lycaenid* butterfly, which could not be identified with certainty."

Undoubtedly the BOIC readership's curiosity would have been aroused by the unfamiliar scientific names used in the above report, especially as common names were not included. Clearly some did not have common names in those days, and some authors, in particular professional entomologists, were reluctant to use them - as is still the case today.

However, in the October 1997 issue of the Australian Journal of Entomology (Vol. 36: pp197-212 appeared a paper entitled "A Provisional List of Common Names for Australian Butterflies" written by Dr. Michael Braby (compiler and Editor of the



CSIRO's new Australian Butterfly Book project) and four of his colleagues. This paper attempted to standardise the common names of Australian butterflies and suggested appropriate new ones. The currently accepted scientific species names were also included, however a comparison of these with those in earlier standard works such as Common and Waterhouse "Butterflies of Australia" 1972 and 1981 editions shows many changes, including reversion back to some previous names such as *Belenois* in lieu of *Anaphaeis* for the Caper White.

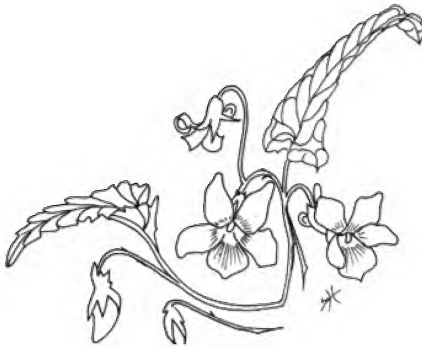
In our next newsletter I will list all the butterflies in Illidge's report with their current common name, suggested new "common" name and the current scientific name. I wonder how many of our readers will have guessed correctly as to their identity - No prizes but we would welcome your feedback.

John Moss

PLANT PROFILE

Violet Observations

The Arrowhead Violet (*Viola betonicifolia*) is the sole foodplant of the caterpillar of the endangered Australian Fritillary butterfly. As understanding the biology of the violet will help to discover the biology of the butterfly, I thought I would share some of my observations of the plant in the *Melaleuca* wetlands where it grows.



Arrowhead Violet

Germination

While the violet can become a pest in a nursery situation, the seed can be difficult to germinate at will. It would be useful to germinate seeds reliably and so preserve the local gene pool.

At a site in Wynnum I found regeneration of seedlings in the exposed fibrous root mats of the *Melaleucas*. There was little germination in the lower moister depressions where there was little organic matter and a layer of silt. This

site was not densely covered with grass.

There was also regeneration at a site in Fitzgibbon that was heavily overgrown with blady grass. Several years ago there were scattered violets surviving in occasional gaps in the grass cover. But now, in some places, many years of accumulated grass had become flattened down by rain and was slowly decaying, forming a mat on the surface. Any surviving violets now had access to the light and were growing well and



producing seeds. The seedlings were germinating where the fibrous layer of dead leaves was moist and in a sunny spot.

I attempted to duplicate these conditions at home. I placed a kitchen sponge in a rectangular take-away container and added water to half the height of the sponge. I sprinkled the sponge with violet seeds and placed the container where it received direct morning sun. Sufficient water was provided so that the surface of the seeds was kept moist at all times. About half of the seeds germinated within two weeks. I tried this procedure several more times and was mostly successful with an occasional failure. Seed trays kept in bright but not direct sunlight did not produce any germination.

Fire

A site at Logan Village with a large population of violets had recently experienced a fire probably about a month before I visited it. It had also recently rained and there was a lot of surface water in some places.

The extent of the fire was patchy, leaving many areas unburnt. This allowed comparison of burnt and unburnt areas. Especially useful were patches of violets which were only partially burnt.

One patch was slightly drier and had only a sparse covering of grass and violets. Where this patch was burnt there was no regeneration of adult violets or signs of any seedlings.

Another violet patch was wetter and had a thicker covering of grass. The adult violets here were regenerating quite well in the absence of the grass. The growing points of the violets seemed to be just below the level of the soil and perhaps survived the fire in this way. There was no evidence of any seedlings. This observation was done in the month of January and very few of the unburnt violets had recently produced seeds. Perhaps the soil seedbank would be low and this may explain the lack of seedlings.

I had previously tested several batches of seed to see if they responded to the hot water treatment used to germinate acacias and other fire dependent species. None of the seeds germinated.

Frank Jordan

YOU ASKED

Question:

I saw lots of long winding tracks on the trunks of some smooth barked eucalypts. What made them?

If these tracks were made up of rows of small circular marks they are probably the feeding tracks of an unusual native slug. It is white with a red triangle on its back.



This slug hides in the ground or in the leaf litter during the day and feeds during the night. The scientific name of the animal is *Triboniophorus graeffei*.

Frank Jordan

WORLD WIDE WEB SITES TO WATCH

This site may amuse you - Arthropod Proverbs -
<http://gnv.ifas.ufl.edu/~entweb/entomolo.htm>

LIBRARY BOOKS FOR LOAN

The following books are currently available for loan at meetings:-

Australia's Butterflies, by Peter Wilson

Butterfly Magic, by Helen Schwencke and Frank Jordan

Australian Cicadas, by Max Moulds

Butterflies of Australia, by Common and Waterhouse, 1981

Butterfly Watching, by Paul Whalley

Flying Colours, by Mike and Pat Couper

ADS AND EXCHANGES

Sometimes you may have an oversupply of legally obtained caterpillars of non restricted species and your food supply will not hold out. If this happens, contact Rob MacSloy - 07 3824 4348 - who operates the Register of Host Plants. He can put you in touch with prospective "foster parents". Have **YOU** advised Rob of the host plants you have available?

Heather Eveans has kindly offered to supply to members, plants of the Burney Bean (*Mucuna gigantea*) host of the Green Awl (*Hasora discolor*). Contact Heather on 3390 2324. (I have been privileged recently to have the Green Awl lay on my Burney Bean. Beautiful. Ed.)

OTHER GROUP'S ACTIVITIES

Eprapah Creek Catchment Landcare Association presents "Using mudflat invertebrates as a pollution early warning system" presented by Guest

Speaker Greg Skilleter (UQ Zoology Dept)

When: Thursday 18th March, 7.30pm

Where: The "Bunkhouse", Eprapah Environment Education Centre, cnr.
Cleveland-Redland Bay Rd & Colburn Ave., Victoria Point (Entry via
Colburn Ave Gate 3)

Contact: Lyn Roberts, 07 32064792

SGAP Autumn Plant Sale

When: 18th April, 9am-3pm

Where: Grovely TAFE Nursery, off Casey Street, Keperra.



BUTTERFLY AND OTHER INVERTEBRATES CLUB PROGRAMME

MARCH - White Rock and Pine Mountain Excursion

When: Sunday, 21st March, meeting 10am at Redbank Plains

What: We hope to see butterflies which prefer a dry habitat

Bring: Lunch and other refreshments, insect repellent

APRIL -Bushfood, Butterflies, Glow-worms in the Currumbin Valley to be led by John Palmer

When: Saturday, 24th April, 4.00pm - 8.00pm

Where: Meet at the Tarrabora Reserve, Gold Coast Highway, just south of the Currumbin/Palm Beach Bowls Club

What: The first stop will be at the Reserve for an early Picnic dinner and tour of a bushfood planting in the Reserve. This will be followed by a stop outside Nicoll National Park, along Currumbin Creek Rd, in the Currumbin Valley on our way to Mt Cougal National Park at the end of Currumbin Creek Rd. We plan to arrive at Mt Cougal National Park in the early evening for a gentle stroll on paved road to look at the Glow-worms at road cuttings in the park. With luck, and if it has been wet, we may see luminescent fungi as well. Our excursion leader, John Palmer has an extensive knowledge of Australian Plants, and will explain aspects of the Currumbin Creek catchment

Bring: Picnic dinner and refreshments, insect repellent and a good torch

MAY- Committee meeting

When: Thursday, 6th May, 6.00pm

Where: Georgina's at McGregor

What: We will be discussing the Club's plans and activities for the coming three months. These meetings are good information sharing sessions, and all members are welcome to attend.

Bring: A plate of food to share

"Why slaters are good for you. Guest Speaker: Dr. Glen Ingram

When: Thursday, May 27th, 7.30pm

Where: Downfall Creek Bushland Centre, Rode Rd., McDowall

What: Glen will give a exposition of the life of slaters, in their many interesting and varied forms

RSVP: Helen, ph. 3844 6677, email hschwenc@dovenetq.net.au to confirm the meeting time and location for all activities



ACKNOWLEDGMENTS

Producing this newsletter is done due to the efforts of:

- Those who sent in letters and articles
- Lois Hughes who provided illustrations
- Daphne Bowden who works on layout, production and distribution
- Steve McGoldrick who works on production and layout
- Georgina John who works on editorial content and helps with design
- Helen Schwencke who developed the overall design and works on content
- Lois Hughes who developed the cover design
- Frank Jordan for inspiration

We would like to thank all these people for their contribution

ARE YOU A MEMBER

Please check your mailing label for the date your membership is due for renewal. If your membership is due, please renew as soon as possible.

Butterfly and Other Invertebrates Club Inc.

c/- PO Box 2041

Runcorn Q 4113

Next Meeting: 21st March 1999 - White Rock and Pine Mountain Excursion



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